

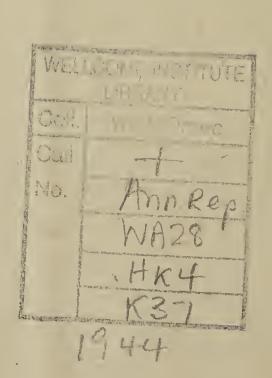
COLONY AND PROTECTORATE OF KENYA

# MEDICAL DEPARTMENT ANNUAL REPORT 1944

(Abbreviated)



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## MEDICAL DEPARTMENT ANNUAL REPORT, 1944

#### **STAFF**

The outstanding problem before the Medical Department during 1944 was no different from that of previous war years. It was to maintain existing services and meet a rising, ineluctable demand for remedial medicine with a regular complement of professional men and women smaller than that of 1938. The order of the effort may be judged from the following table:—

	Doctors	Nurses	In-patients	Maternal Deliveries	Surgical Operations	
1938	53	54	52,703	2,622	18,176	
1944	51	47	115,568	5,051	22,805	

The call upon professional staff in those branches in which their services are most directly required has, in these six years, approximately doubled. The demand has been met in part by the engagement of temporary medical officers and nursing sisters, but under this pressure it was unavoidable that medical staff should have become increasingly pre-occupied with the day-to-day demands of curative measures at the expense of prevention. During 1944 very considerable expansion of treatment facilities can be recorded. The preventive services were maintained but the balance between the two has been gravely disturbed and is not likely to be restored until further recruitment of professional staff is possible.

Within the clinical field responsibilities are, of necessity, being increasingly delegated to Africans. As an example of the circumstances, attendances at the Nairobi Eye Clinic have risen from 5,500 in 1938 to 24,000 in 1944. The European staff of one ophthalmologist and one nursing sister remains unchanged. It is a pleasure to record the devotion and intelligence with which great numbers of Africans are discharging the responsible duties now being put upon them. Some of the modern forms of treatment which they are called upon to carry out and which have effected such large reductions in the mortality of pneumonia, cerebro-spinal meningitis, and other dangerous diseases not only require judgment and skill for their successful application but offer unrivalled opportunity for peculation. Tablets of M. & B. 693 fetch as high a price as Sh. 1 each on the black market and provide temptation of the strongest sort to an African in independent charge of a ward or dispensary. Pilfering is common enough, and other forms of irresponsibility, but the outstanding feature of the situation is the conscientious attitude of a substantial majority of those in whom this trust is being newly placed, without close supervision or the support of a professional tradition. The present achievements of Africans in this field, so rapidly extended by wartime necessities, is an excellent augury for the expansion of the medical services to Africans on a largely African basis.

Of the eight medical officers who remained seconded to the Forces at the end of 1943, three were released and re-joined the Department during the year. Three officers retired or were transferred to other colonies, and one was seconded for duty with the Pensions Assessment Board.

After twenty-three years' service in Kenya, Dr. F. J. C. Johnstone proceeded to the Gold Coast to take up the appointment of Director of Medical Services in that Colony.

The establishment of regular nursing sisters fell far below normal. A number of temporary, part-time and unqualified nurses was engaged locally and the greatest credit is due to those women, many with domestic responsibilities, many no longer young, who have so cheerfully returned to the laborious and exacting duties of nursing during the present emergency. Nevertheless, the utmost difficulty was experienced by both Government and private hospitals in maintaining nursing services and the overcrowding of African hospitals threw a great additional strain on depleted personnel. It was among nursing sisters that ill-health was most obvious and six were invalided from the service or proceeded on vacation leave on medical grounds. Eight nursing sisters and three mental nurses arrived during the year on first appointment.

Seven health inspectors arrived on first appointment and three were lost on transfer or invaliding.

Four African assistant medical officers obtained the Diploma in Medicine of Makerere College and entered upon their duties with the Department.

Training facilities for African male staff at the Medical Training Depot in Nairobi were maintained at their pre-war level. No expansion was possible, but a large accession of African male nursing orderlies and of special health workers of many categories is expected from the Army upon demobilization. These should meet present needs and also a large part of the requirements of post-war development, but it is a matter for great regret that neither staff nor premises allowed of a beginning being made in the systematic training in nursing and health visiting of females of any race.

The headquarters and administrative establishment has long been insufficient to give deliberate and considered attention to the many complex health problems which the progress of the Colony is now presenting. No increase of this staff was possible during the year and in addition to its regular duties much of its time was occupied in the preparation of a comprehensive and detailed plan for the expansion of the Department after the war.

A conference of the Directors of Medical Services of the East African territories was held in Nairobi in September.

#### PUBLIC HEALTH

The general health of all communities showed no abnormal features. The satisfactory rainfall over most of the Colony resulted in a greatly improved food position. Except for the declining smallpox epidemic there was no large outbreak of communicable disease.

The outstanding feature of the health records for the year is the rising tide of African patients presenting themselves for treatment. There is no reason to think that this represents any actual increase in disease or that the total is still more than a part of the massive ill-health which prevails among the African population. No more evidence is required of what remains to be accomplished in the physical well-being of this group than a brief comparison of the fine physique of the African soldier with that of his peasant brother. Many common diseases from which the African suffers are preventable and it is no part of medical policy that cure should bear the disproportionate relation to prevention which circumstances have compelled. The balance will be restored when this is possible. But a great

deal of the prevailing ill-health is not preventable by any measures which can properly be regarded as medical and arises from malnutrition, from unfavourable environment and from ways of life inimical to health. A general and growing appreciation of this fact can be recorded.

The number of cases of malnutrition reported from native hospitals is increasing. In part this may represent an actual increase resulting from the recent successive years of drought but in part it is undoubtedly an indication of more accurate recognition of the varied manifestations of this condition. The importance of adequate nutrition to the health of the community requires no emphasis. It received authoritative confirmation during 1944 by the acceptance of the Constitution of the United Nations Conference on Food and Agriculture (the Hot Springs Conference) by the Government of the United Kingdom on behalf of the Colonial Empire.

The improved rainfall, after years of relative drought, threatened a wide-spread malaria epidemic. Epidemics materialized in a number of rural areas. In the southern part of the Nyanza Province, where a medical officer and teams of Africans were drafted to deal with a particularly serious situation, 65 per cent of the population were found to be infected and 40,000 persons received treatment between April and August. There were smaller outbreaks in other unprotected areas and the contrast between these and the very moderate rise in incidence in the towns throughout the country clearly demonstrated the effectiveness of the control measures in force in urban areas. The Railway Administration, operating largely in controlled areas, reports that loss of time from this disease in 1944 amounted to no more than 0.1 per cent. The urgent need to intensify and extend these measures is fully recognized and there is good prospect that the discovery of new insecticides and the development of new methods of control in the field during recent military operations will permit of great advances being made in the post-war period.

There was further extension of malaria into the highlands and a small but severe outbreak occurred at Timboroa at an altitude of 8,300 feet. The problem of highland malaria is a serious one and is receiving close attention. A plan for the control of the disease over the whole of the southern highlands of the Nyanza Province was completed during the year and further preliminary surveys were undertaken at Londiani, Equator, Timboroa, Kapsabet, Thika and Kiambu, together with others in the Coast Province.

In June, 1944, the Inter-Departmental Committee on Yellow Fever Control in the United Kingdom scheduled the whole of Kenya as an endemic yellow fever area. As a result the countries outside the endemic area now demand certificates of immunization against yellow fever of all travellers from Kenya. Until the regulations became widely known, much inconvenience and delay was occasioned to both passengers and shipping and a considerable additional burden was thrown upon, the Port Health Authorities in Mombasa in the inoculation of ships' crews.

No case of yellow fever was reported in the country during the year and a very large organization is maintained to prevent it. Mosquito control measures are operated by the Medical Department, municipalities and the Kenya and Uganda Railways and Harbours in all the larger towns, the coast ports and along the central railway. The Aedes index was held at a low level at all essential points. At Kisumu and Mombasa 2,724 aircraft were disinfested. Over 100,000 yellow fever inoculations were carried out in Mombasa alone. A viscerotomy service was

inaugurated at Kisumu. A two years' survey of the Kaimosi forest for jungle yellow fever was concluded and other surveys were commenced on the coast and near Nairobi.

In respect of this formidable disease a very strong preventive position has been built up and is being maintained.

A limited outbreak of Gambian sleeping sickness occurred in South Kavirondo. A survey was carried out by a medical officer in January and a programme of clearings was instituted. Two treatment centres were established and dealt with 935 cases during the year. The extensive control measures in operation in Central Kavirondo against Rhodesian sleeping sickness continued and no spread of the disease occurred.

In a number of areas in the Nyanza Province there is a high incidence of onchocerciasis and 14 per cent of conscript labour from infected locations were rejected during the year on account of this disease. Dr. J. C. Buckley, Helminthologist of the London School of Hygiene and Tropical Medicine, who has been working on the problem, completed his investigations in March. The breeding places of the vector *Simulium neavei* have not been ascertained but an experiment in control is in operation which promises success.

Preventive measures against insect-borne diseases, of which those described above form part, already represent a large proportion of the Department's activities. They demand a high standard of special skill and knowledge. At the end of the year steps were taken to set up a Departmental Division of Insect-Borne Diseases and the whole of the organization comprising research, field surveys, and control was brought under the central direction of a senior specialist officer. It is expected that by the co-ordination of all work in this field greater efficiency and economy will be effected and the machinery be made ready for expansion. A plan of development for the Division was formulated.

The 1943 epidemic of smallpox continued in 1944 on a diminishing scale and by the middle of the year sporadic cases only were occurring.

The incidence of venereal disease among African soldiers continued at a high figure and there was some rise in the numbers of civilians presenting themselves for treatment. Legislation under the Defence Regulations was introduced to permit the compulsory examination and, if necessary, treatment, of persons suspected of being prostitutes or reported to be suffering from venereal disease. Facilities for treatment were extended at a number of stations and special clinics were opened in co-operation with the military authorities at Mombasa, Nakuru, Gilgil, Londiani and Kisumu. The Nairobi Municipality maintained its excellent service of clinics for women. The most strict limits upon the extension of these services and upon "follow up" was imposed by staff shortage, particularly of nursing sisters, and there was a disquieting increase in sulphonamide-fast cases of gonorrhoea.

No general investigation into the pressing problem of tuberculosis was possible. A small survey carried out during the year at Kerugoya disclosed that 62 per cent of male adults in this rural area are positive reactors to the Mantoux test and returns leave no doubt that infection is now widespread throughout the Colony.

The actual rise in recorded cases is not large and this is at variance with the impressions of medical officers who generally consider that the disease is rapidly increasing. The suggestion has been made that many Africans have now come to regard the disease as incurable and in consequence do not attend hospital and come under notice. It has to be admitted that this conclusion is entirely justified

by the outcome in the great majority of cases. There is general agreement on the initial measures required to deal with the problem. The necessary resources do not at present exist.

A variety of personal preventive measures were carried out on a large scale. In addition to extensive immunization against smallpox and yellow fever, 30,000 persons were inoculated against plague, nearly 80,000 against typhoid and 3,000 against diphtheria, including 500 children in Nairobi schools.

#### HYGIENE AND SANITATION

The arrival of newly appointed health inspectors permitted the resumption of sanitary measures under these officers at a number of stations in which they had been suspended. With the advice and assistance of departmental officers there were completed 2,600 African dwellings, 2,800 rat-proof grain stores, 2,200 latrines, 500 protected fireplaces and 24 rural water supplies. 150,000 rats were destroyed and 1,000 insanitary houses demolished. 2,000 trees were planted. Extensive and sustained effort, with the support of Local Native Councils, was directed to the improvement of the general sanitary condition of villages, markets and trading centres in all parts of the country.

Much progress was made in urban areas with African housing schemes, both by local authorities and by Government.

#### PORT HEALTH ADMINISTRATION

The procedure was continued under which vessels from non-infected ports were granted pratique by the pilot if a Certificate of Health was signed by the Master or Surgeon. Nevertheless, ships and dhows to the number of 2,183 were boarded by the Port Health Officer of Mombasa or his staff during the year. The only major infectious disease encountered was smallpox, three steamships and eight dhows being found infected on arrival.

Early in the year an amendment to the Public Health (Port Health) Regulations, 1923, was made to enable the Port Health Officer to call for the fumigation of ships. At the same time Mombasa was declared to be a port fulfilling the requirements of Article 28 of the International Sanitary Convention of 1926. In March the first International Deratization Certificate was issued, and from then till the end of the year twenty-five deratization certificates and eleven exemption certificates were granted.

The sanitary condition of the Port of Mombasa was maintained at a satisfactory level.

#### **HOSPITALS**

At the end of 1944 the Department was operating 99 European, 152 Asian and 3,300 African beds. The pressure on all this accommodation was very great and many African hospitals regularly held patients far in excess of their total beds. Over 1,300,000 patients received treatment during the year at institutions operated or supervised by the Department.

The construction of permanent additions to a number of African hospitals totalling over 350 beds and including entirely new hospitals at Wajir and Moyale, was completed or commenced. Twenty-two beds were added to Mathari Mental Hospital. Two small twenty-two bed African hospitals at Molo and Londiani were under construction by European committees with funds provided in part by public subscription and in part by Government. Many ancillary buildings and staff quarters were erected,

Funds were voted and plans prepared for a new Rehabilitation Centre and a new European block for the Mathari Mental Hospital. A grant of £125,000 was obtained from the Colonial Development and Welfare Fund for a further African ward block at the Nairobi Group Hospital.

A review of hospital layouts was carried out as part of development proposals and a range of plans for hospital buildings of many varieties was completed.

The Nairobi Rehabilitation Centre admitted 85 ex-soldiers and 150 civilians for treatment during the year. A good deal of difficulty was experienced in inducing African soldiers after their discharge from the Army to submit themselves to the long courses of treatment which physical rehabilitation involves. Agreement was reached with Uganda, Nyasaland, Tanganyika Territory and Zanzibar for mutual use of the artificial limb section of the Rehabilitation Centre and an expert from Roehamption visited to advise on the equipment and organization of the section. Machinery and parts were ordered and the European fitter proceeded to England for instruction.

The increasing popularity of the facilities provided at native hospitals for ante-natal examination, delivery and child welfare has thrown a very heavy strain on an exiguous nursing staff. At Kerugoya, which has one nursing sister with a large general hospital to supervise, 450 women were delivered during 1944 and there were 7,000 attendances at clinics. At Kiambu, where there are two sisters, 600 cases were delivered. These figures represent exacting work by day and night as well as solid and satisfying achievement.

#### LABORATORIES

The number of routine examinations conducted at laboratories has risen from 72,000 in 1938 to 126,000 in 1944. This mass of work leaves the staff with little time for research, but laboratory research was conducted into the constitution of local foodstuffs, upon D.D.T., dimethyl phthalate and other insecticides and repellents, and upon the efficacy of a number of types of mosquito netting. Extensive field trials were carried out on a variety of problems connected with insect control. The measurement of European school children was continued and an interim report on the data from 1,079 children was completed.

Vaccine lymph issues to the military and civil authorities of Kenya and adjoining territories amounted to 4,700,000 doses. 500,000 c.c.s. of other vaccines were produced and a partially purified extract of pencillin for external use.

## TABLES VITAL STATISTICS

The estimated population of the Colony for the year 1944 was as follows:—

					1944
·T					ດາຸງດາ
Europeans	* *	• •	• •	• •	23,323
Asians					74,085
Goans					6,177
Arabs and Oth	ners				32,949
Africans					3,600,000

The above figures are exclusive of military personnel not of local origin.

Cases Treated at Hospitals, Dispensaries, Out-Dispensaries, Venereal Clinics and the Mental Hospital

	•			Eur	OPEAN	Asiatic an	ND AFRICAN
	•			In-patients	Out-patients	In-patients	Out-patients
1942 1943 1944		• •	• •	2,718 $2,417$ $2,746$	6,074 5,149 7,177	$80,191 \\ 92,485 \\ 112,822$	$\begin{array}{ c c c c c }\hline 535,865 \\ 604,374 \\ 589,963 \\\hline \end{array}$

In addition, 607,594 first attendances and 425,853 re-attendances were recorded at out-dispensaries.

The Incidence of some of the more Important Diseases

S 250 0		1942	1943	1944
Smallpox	 -	Nil	3,551	3,372
Cerebro-spinal Meningitis	 	516	471	889
Plague	 	754	17	18
Malaria	 	56,542	58,560	77,840
Tuberculosis	 	1,938	2,548	3,201
Pneumonia	 	8,152	8,802	11,142
Helminthic Diseases	 	48,525	46,139	39,517
Venereal Diseases—				
Syphilis	 	13,777	13,382	13,907
Gonorrhoea		6,481	7,807	8,032

### Percentage of Morbidity

Table showing the main causes of morbidity in relation to in-patients and out-patients at hospitals and dispensaries.

		.1942	1943	1944
TOTAL INCIDENCE	• •	624,848	704,425	712,708
	-	Per cent	Per cent	Per cent
Epidemics, etc		20.4	$17 \cdot 7$	$22 \cdot 7$
Diarrhoea and Enterics		$2 \cdot 0$	<b>3</b> ·8	$2 \cdot 9$
Caries and Pyorrhoea		$2\cdot 1$	· 2·1	1.9
Ankylostomiasis		0.3	0.4	0.3
Other Diseases of Digestive System		17.8	$15 \cdot 4$	14.9
Pneumonia		1.4	. 0.9	$1 \cdot 1$
Bronchitis		11.5	9.8	$9 \cdot 1$
Other Diseases of Respiratory Syste	em	$5 \cdot 3$	$4 \cdot 7$	5.7
Organs of Vision		3.5	4.1	3.9
Ear and Mastoid		1.5	$1 \cdot 4$	1.6
Other Diseases of Nervous System		$2 \cdot 9$	$1 \cdot 0$	1.5
Circulatory System		0.4	0.5	0.5
Genito-urinary System		$1 \cdot 0$	0.9	1.2
Ulcers		6.4	7.5	$7 \cdot 2$
Scabies		$2 \cdot 4$	3.5	3.3
Other Diseases, Skin and Cellular T	is-	,		
sues		4.0	$4 \cdot 0$	4.3
Bones and Organs of Locomotion		0.9	3.0	$2 \cdot 0$
External Causes		11.0	$12 \cdot 3$	9.8
General Diseases		$2\cdot 5$	$3 \cdot 4$	3.6
Ill-defined and other Diseases		$\frac{1}{2} \cdot 7$	$3 \cdot 6$	$2\cdot 5$

## Maternity and Child Welfare (African)

The comparative figures of maternal deliveries for the past three years are as follows:—

	1942	1943	1944
At Centres established in connexion with Government Hospitals with the help of Local Native Councils and at Government Hospitals	3,971	4,359	5,051
	1,866	1,724	1,732
	2,289	2,703	3,033
	8,126	8,786	9,816

## Surgery The table of operations performed throughout the Colony is as follows:—

			_	1942	1943	. 1944
On Europeans			 • •	792	1,089	1,153
On Asians	• •		 	1,068	1,394	1,579
On Africans	• •	• •	 • •	17,296	19,527	20,073
				19,156	22,010	22,805

### Mathari Mental Hospital—All Races

					1942	1943	1944
A Janianiana					200	236	967
Admissions	• •	• •	• •	• •	206		267
Discharges		• •			161	. 157	171
Deaths					41	77	48
					J		

#### Finance

The sanctioned estimates of expenditure for the Medical Department for the years 1942, 1943 and 1944 were as follows:—

						Ordinary	Extra- ordinary	Total
1942		• •			• •	£ 261,227	£ 15,630	£ 276,857
1943						280,829	48,826	329,655
1944	• •	• •	• •	• 10	••	319,687	31,905	351,592

F. R. LOCKHART,
Acting Director of Medical Services.

